

**APPENDIX B**  
**Data Base on Dredging and Filling**

## APPENDIX B

### Data Base on Dredging and Filling

Part of this project effort was invested in integrating the data into a computer-manipulable data base, both to support the analyses of the project, and to provide a resource for the use of future researchers. The data bases created in this project were structured to maximize their transferrability especially among microcomputers, by utilizing robust ASCII formats. Most spreadsheet, graphics and data base products have the provision of accepting ASCII file input, so this format can be readily imported. The magnetic products are available from the Galveston Bay National Estuary Program (and whatever agencies that GBNEP might designate for archiving and dissemination of the data). This appendix summarizes the data files and their formats, serving as a summary Users Manual for these products.

#### B-1. Source files

There are two primary data sources for this study, the records on dredging contracts of the Galveston District Corps of Engineers and the permit files for Department of the Army (10/400) permits, also at the Galveston District Corps. Most of this data, being available only in paper copy, was keyboarded for the present study. To simplify the labor-intensive keyboarding process, a general format for data entry was devised using LOTUS 123™ software. The LOTUSTM files so created are referred to here as "source data files" because they embody the digital record of whatever was available at the source, i.e. dredging contract data or 404-permit project information. These were then further processed (by exporting as ASCII images of \*.WK1 files). While these "source files" will not generally be of interest to researchers, the fact that these are a digital record of historical file information has motivated their preservation. These are included in the project data base as "source files" in \*.WK1 format (and therefore must be read using software capable of decoding this format, e.g. LOTUS 123™ or EXCEL™).

##### *B-1.1 Dredging contract data*

The USCE dredging contracts are organized by project, and within each project by dredging contract. Therefore, the first row is the name of the project (e.g., Texas City Channel) and occasional comments. Each following contract data consists of a header line and any number of station/dredging lines, with the following formats:

<i>column</i>	A	B	C	D	E	F	G	H
<i>header</i>	*YEAR	CNTR	DATE1	DATE2	ESTVL	TOTVL	NEWVL	COM1
<i>dredging</i>	STA1	STA2	VOL	COM2				

where:

*YEAR	Year of contract award (four digits with leading asterisk)
CNTR	Contract number or designation
DATE1	starting date MO/YR of dredging work
DATE2	ending date MO/YR of dredging work
ESTVL	estimated volume (cubic yards) to be dredged
TOTVL	final determination of volume (cubic yards) dredged
NEWVL	volume (cubic yards) of new work included in TOTVL
COM1	comments
STA1	beginning station of dredged reach (ft)
STA2	ending station of dredged reach (ft)
VOL	dredged volume (cubic yards) between STA1 and STA2
COM2	comments

The leading asterisk before YEAR was used in further processing to flag the appearance of a new set of dredging contract data. The contract number (CNTR) is the basic filing retrieval designation for the Area Office and District Office files. Comparison of the data employed here with the primary contract documents must employ this contract number. The estimated volume (ESTVL) is the pre-dredging determination based on before-dredging surveys and the specified project dimensions to be dredged, while TOTVL is the actual dredged volume based upon after-dredging surveys. In the older data, the reach-by-reach data are estimated quantities only, and actual volume dredged is given only for the entire contract. In later contracts, actual volumes for each dredged reach are provided separately in the contract file. (Which is which can be determined by summing the subreach values; this sum will equal either ESTVL or TOTVL.) Project stations, STA1 and STA2, are in the Corps coordinates specific to the project (and current at the time of the contract). The hyphen has been omitted for simplicity. The reader should consult Table A-1 for details on the Corps station coordinates and their relation to GBNEP coordinates employed in this project. As noted above, VOL may be *estimated* based only upon BD surveys (for the older contracts) or may be *actual* dredged volumes based upon AD surveys (for the later contracts). For convenience, the GIWW contracts are placed in a separate file (GIWW.WK1) from the other projects in Galveston Bay (HSC.WK1).

### *B-1.2 Department of the Army (10/404) permitting data*

The DOA (404) file holdings were delineated in two ways. First (Pass One), all permits were tallied by location and nature of project. The basic files for this analysis are organized by county, as follows:

BRAZORIA  
CHAMBERS  
GALVES\_1  
GALVES\_2  
HARRIS\_1  
HARRIS\_2  
LIBERTY

These are LOTUS™ files (\*.WK1) and were analyzed directly in that format, so there is no combined ASCII data file. Second (Pass Two), the permit files were sub-sampled, as described in Section 4.1 above, for detailed permit information. The source files are designated

D&Fnn.WK1

where *nn* is a two-digit ordered integer (01, 02, 03, etc.), also LOTUS™ format. Each of the Pass One and Pass Two spreadsheet files include a data-entry template as the first entry.

The format followed for the county-by-county statistics is separate spreadsheet pages for individual waterbodies within that county (see Table A-6), annually by column and functionally (Table 4-1) by row.

## **B-2. Data files**

### *B-2.1 Dredging contract data*

The basic source data (see Section B-1.1 above) was processed by first interpolating to 1000-ft reaches along each project. Then this data was arranged chronologically and accumulated into 5000-ft reaches, using the GBNEP coordinates (see Table A-1). Reference is made to Section 3.1 of the main report for a description of the data reduction and processing approach.

This set of dredged volumes by 5000-ft reach for each year comprises the basic raw data of this study, and is preserved as ASCII files designated by the extension \*.5K. This raw data set is tabulated in Tables B-1 and B-2 (as a permanent hard copy as well as a reference).

The contract dredging data have been separated by new work and maintenance, and organized by individual projects, so that for each project there is a separate ASCII file for the new work and maintenance volumes, designated respectively by -NW and -MN appended to the file name. The project names are abbreviated by a (hopefully) transparent indicator, given on the header lines of Tables B-1 and B-2. For example, the Houston Ship Channel is abbreviated HSC, and encompasses the Houston Ship Channel system from the entrance at Bolivar Roads to the terminus of the Light Draft Channel in Houston. There are two files for this project:

HSC-MN.5K  
HSC-NW.5K

corresponding to the maintenance and new work volumes.

#### *B-2.2 Department of the Army (10/404) permitting data*

The source files for Pass Two subsampling of DOA (404) permits, named D&Fnn.WK1 (where  $nn = 01, 02, 03$ , etc.), are in LOTUSTM format. Each entry (the first of which is blank, for use as a data-entry template) consists of the information in Table B-3. The permit number (Row 1) is that of the DOA permit. For complex projects with multiple activities or a sequence of alterations, the permit has been subdivided into separate activities, and designated by a letter appended to the permit number. For example, Permit 4817.00, for the Chocolate Bay channel project, involved channel dredging in several different reaches, and the disposal of dredged material in open-bay (shallow water) areas, in upland areas, and in marsh areas. This large and complex project was therefore subdivided into three separate entries, designated 4817.00A, 4817.00B and 4817.00C. DATE is the date of permit issue. The expiration date of the permit (EXPIRDATE) is almost always 31 December of the third year after issuance.

Nature of Project is shown by a check list, in which X indicates applicability of the named property. Note the provision for additional entries under "Other." For each project, there is separate provision for dredging and filling. The two may be conducted independently of each other, or may be related, e.g. filling as a means of disposal of dredged material, or dredging as a source for fill material. For data analysis purposes, however, the two are separated. There are separate entry areas (the rightmost columns) for disposal of dredged material and source of fill material. Some of the entries are quantitative, e.g. volumes (in cubic yards) and areas (in acres), and some are qualitative, again presented as a check list with X marking applicable properties. Latitude and longitude are in degrees, minutes and fractions of a minute; for example, 29 14.3 means 29° 14.3' N.

Under HABITAT are broad classes of "habitat" types for the dredging activities and the filling activities. These are checked as appropriate (the character X); definitions are given in Table 4-6. The principal types of habitat affected by a project are identified in the lower left section of the entry as LOSS and GAIN.

These entries are *area* only, in acres. The type of habitat affected is abbreviated in the column under HABITAT as

Httw

where

- |    |   |                                      |
|----|---|--------------------------------------|
| tt | - | habitat type, as follows             |
| w  | - | type of work, D = dredge or F = fill |

#### *Habitat type abbreviations*

PA	previously altered
ED	Existing dredged
SH	shallow bay bottom
IT	intertidal (assumed to be nearshore)
VG	intertidal vegetated (assumed to be marsh)
OR	oyster reef
UP	upland (i.e., above-water land)

For example, HVGD indicates that the habitat area affected was due to dredging of vegetated (marsh) habitat. It is assumed in the analysis performed for this study that any dredging replaces the pre-existing habitat with bay-bottom habitat, and any filling replaces the pre-existing habitat with upland. Therefore, there is no need for separate entries under LOSS and GAIN. For instance, an area given for HSHD is a replacement of shallow bay bottom with bay bottom habitat. Only the shallow bay area needs to be given under LOSS; there is no need for a separate entry for bay bottom under GAIN. Of special importance in this regard is HUPD areas, which amount to new bay-bottom habitat. Finally each entry is terminated by a row of asterisks "\*\*\*\*\*".

There are seventeen such D&F spreadsheet files, including D&FMISC.WK1. For analysis, these were exported as ASCII images and concatenated in a single (large) ASCII data file. This greatly expedited the processing, since the files could be read and analyzed directly by FORTRAN and BASIC codes. A copy of this ASCII file is provided as well, labelled 404.DAT.

Table B-1  
 Maintenance dredging (cubic yards) by year and 5000-ft reach  
 GBNEP coordinates (ft), see Table A-1

**ANCH-MN** Anchorage - Galveston Harbor

	1967	1978	1990
0	0	0	0
5000	0	0	0
10000	0	0	0
15000	0	0	0
20000	0	0	0
25000	0	0	0
30000	0	0	0
35000	1362646	239844	374476
40000	2191838	890615	443974

**ATKIS-MN** Atkinson Island Barge Channel & Mooring Area

	1968	1970	1972	1977	1981	1984	1986	1991
0	0	64716	27738	133789	127725	109860	94290	101631
5000	40338	56929	47446	143354	125014	101185	74629	106302

**BRADY-MN** Brady Island Channel & Basin

	1959	1962	1964	1967	1971	1975	1979	1984
0	36998	12414	43164	40103	27371	28883	31158	22667
5000	0	955	2105	3437	4562	802	865	0
		1988						
0	14520							
5000	0							

Table B-1 (continued)

CEDAR-MN

Cedar Bayou Channel

	1947	1949	1951	1953	1955	1958	1961	1963
0	0	0	0	0	0	0	0	0
5000	0	0	8542	12062	13598	0	0	0
10000	76408	67756	84915	100020	112755	59611	50856	40154
15000	78741	113615	83912	104370	123575	129420	101590	113690
20000	80655	120765	81580	114490	148750	129420	101590	146187
25000	30600	60310	40741	61756	80236	69809	54798	59814
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
	1965	1968	1970	1972	1982	1989		
0	4667	0	0	0	0	0		
5000	97794	47009	39899	0	50	19032		
10000	109486	69828	27943	31210	83960	118955		
15000	117993	97705	59732	75448	84136	128771		
20000	142585	132462	82625	85413	85715	94524		
25000	72892	59995	39585	57088	83647	106241		
30000	0	0	0	0	65160	90109		
35000	0	0	0	0	60638	75988		

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CHOC-MN

Chocolate Bayou Channel

	1950	1988
0	0	155296
5000	55343	187161
10000	58465	150515
15000	58465	151993
20000	58465	160601
25000	58465	177617
30000	58465	168912
35000	35488	110351
40000	0	111729
45000	0	85858

Table B-1 (continued)

## CLRLK-MN      Clear Lake Channel

	1954	1957	1960	1967	1972
0	20438	0	0	4521	0
5000	23225	80373	76693	45215	45360
10000	2875	0	0	3617	0
15000	0	0	0	0	0
20000	0	0	0	0	0
25000	0	0	0	0	0
30000	0	0	0	0	<u>22425</u>
35000	0	0	0	0	0
40000	0	0	0	0	10680
45000	0	0	0	0	6120

## DOUBL-MN      Double Bayou Channel

	1949	1951	1954	1958	1962	1965	1967	1970
0	73065	28268	27192	77063	41782	72176	49822	11936
5000	61374	62487	45683	66053	71866	84112	68015	16899
10000	0	0	0	0	0	0	0	18614
15000	0	0	0	0	0	0	0	20106
20000	0	0	0	0	0	0	0	24575
25000	0	0	0	0	0	0	0	23641
30000	0	0	0	0	0	0	0	27544

	1972	1973	1977	1981	1987
0	0	58930	0	0	0
5000	0	86231	0	0	0
10000	0	99241	64348	53924	48111
15000	12381	105772	101192	77640	79720
20000	74286	140264	130072	119184	125754
25000	0	27932	6444	32513	52172
30000	0	0	0	20967	25462

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GALV-MN

## Galveston Channel

Table B-1 (continued)

	1942	1947	1949	1951	1952	1953	1955	1957
0	0	696721	520494	290752	0	369039	382735	
5000	0	1530660	951865	570736	0	767306	978706	0
10000	0	1630005	1213899	1044555	0	700730	828075	0
15000	0	1504878	1519348	1076860	0	700530	1164746	0
20000	0	720716	799210	549199	0	357255	619678	0
25000	0	0	0	0	0	0	0	0
30000	156016	0	0	0	0	0	0	0
35000	182860	0	0	0	137853	0	0	23832
40000	54858	0	0	0	112788	0	0	140190
					0	0	0	42057
	1958	1960	1962	1963	1964	1965	1969	1970
0	179595	561134	605360	0	596796	154629	647574	
5000	561235	1182904	1269642	0	1180895	462523	1058550	0
10000	561235	1125465	1220010	0	0	1087980	848895	0
15000	561235	883035	1761928	0	0	1227527	1149066	0
20000	286229	279447	608158	0	0	645687	608899	0
25000	0	0	0	134396	0	0	0	0
30000	0	0	0	174540	0	128760	0	86765
35000	0	0	0	174540	0	145930	0	149138
40000	0	0	0	52362	0	183538	0	231985
					0	62412	0	110264
	1972	1973	1974	1978	1982	1986	1989	
0	533121	0	580000	0	1427399	865688	570784	
5000	702215	0	908819	0	3023102	400963	900732	
10000	840848	0	722579	0	2942922	0	842125	
15000	1161979	0	872304	0	3598569	0	1201865	
20000	456824	0	399205	0	1505731	0	523375	
25000	0	0	0	124126	111002	106140	0	
30000	0	87024	0	160601	137719	155882	0	
35000	0	137311	0	236105	198434	193317	0	
40000	0	23086	0	34341	27566	26995	0	

GCSLP-MN

## Galveston Channel Slips

Table B-1 (continued)

	1969	1972	1974	1978
0	0	0	0	0
5000	4815	0	0	0
10000	0	0	0	0
15000	88136	190800	57116	0
20000	0	84647	0	995546
25000	0	0	0	134912

GIWW-MN

## Gulf Intracoastal Waterway

	1938	1939	1940	1941	1942	1947	1950	1951
0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0
10000	0	0	0	0	0	0	0	0
15000	0	0	0	0	0	0	0	0
20000	0	0	0	0	0	0	0	51427
25000	0	0	80668	0	0	0	0	171425
30000	0	0	10083	0	0	0	0	171425
35000	0	0	0	0	0	0	0	171425
40000	0	0	0	0	0	0	0	171425
45000	0	0	0	0	0	0	0	171425
50000	31456	0	0	0	0	0	0	51427
55000	78640	0	0	0	0	0	0	0
60000	78640	0	0	0	0	0	0	0
65000	31456	0	60501	0	0	0	0	0
70000	0	0	100835	0	0	0	0	0
75000	0	0	100835	0	0	0	0	0
80000	0	0	100835	0	0	0	0	0
85000	39320	0	40334	0	0	0	0	0
90000	78640	0	0	0	0	0	0	0
95000	78640	0	0	0	0	0	0	0
100000	78640	0	0	0	0	0	0	0
105000	78640	0	0	0	0	0	0	0

Table B-1 (continued)

GIWW-MN (continued)

	1938	1939	1940	1941	1942	1947	1950	1951
110000	84693	0	0	0	0	0	0	0
115000	108905	0	0	0	0	0	0	0
120000	108905	0	0	0	0	0	0	0
125000	108905	0	54451	0	0	0	0	0
130000	108905	0	54451	0	0	0	0	0
135000	108905	0	0	0	0	0	0	0
140000	108905	0	0	0	0	52479	60792	0
145000	21781	0	0	0	0	262395	202640	0
150000	0	0	0	0	0	86065	66465	0
155000	0	0	0	0	0	0	0	0
160000	0	0	0	0	0	0	0	0
165000	0	0	0	0	0	0	0	0
170000	0	0	0	0	0	0	0	0
175000	0	0	0	0	0	0	0	0
180000	0	0	0	0	0	0	0	0
185000	0	0	0	0	7314	0	0	0
190000	0	0	0	0	35402	0	0	0
195000	0	0	0	126955	0	0	0	0
200000	0	0	0	158615	0	0	0	0
205000	0	0	0	88032	0	0	0	0
210000	0	44657	0	0	0	0	0	0
215000	0	212655	0	128264	0	0	195572	0
220000	0	212655	0	0	0	0	214915	0
225000	0	212655	0	0	0	0	214915	0
230000	0	212655	0	0	0	0	191274	0
235000	0	212655	0	0	0	0	0	0
240000	0	212655	0	0	0	0	0	0
245000	0	189263	0	18584	0	0	0	0
250000	0	0	0	168950	0	0	0	0
255000	0	0	0	168950	0	0	0	0
260000	0	0	0	167260	0	0	0	0
265000	0	0	0	0	0	0	0	0
270000	0	0	0	0	0	0	0	0

Table B-1 (continued)

## GIWW-MN (continued)

	1938	1939	1940	1941	1942	1947	1950	1951
275000	0	0	0	136574	0	0	0	0
280000	0	0	0	168610	0	0	17784	0
285000	0	0	0	168610	0	0	161675	0
290000	0	0	0	168610	0	0	161675	0
295000	0	0	0	168610	0	0	161675	0
300000	0	0	0	168610	0	0	46885	0
305000	0	0	0	168610	0	0	0	0
310000	0	0	0	168610	0	0	0	0
315000	0	0	0	168610	0	0	0	0
320000	0	0	0	168610	0	0	0	0
325000	0	0	0	15174	0	0	0	0
330000	0	0	0	0	0	0	0	0
	1952	1954	1955	1957	1958	1960	1961	1962
0	97355	0	0	0	0	0	0	87146
5000	97355	0	0	0	0	0	0	84945
10000	97355	0	0	0	0	0	0	79571
15000	97355	0	0	0	0	0	0	67035
20000	68148	0	21025	0	0	0	39886	46924
25000	0	0	70085	0	0	0	132955	0
30000	0	9849	70085	0	0	0	132955	0
35000	0	49245	70085	0	11428	0	137525	0
40000	0	49245	70085	0	114280	0	178665	0
45000	0	49245	70085	0	114280	0	155306	0
50000	89120	49245	21025	0	114280	0	100805	0
55000	127315	49245	0	0	114280	0	100805	0
60000	127315	49245	0	0	34284	0	100805	0
65000	127315	49245	0	0	0	0	100805	0
70000	127315	49245	0	0	0	0	100805	0
75000	127315	49245	0	0	0	0	113692	0
80000	127315	49245	0	0	0	0	115125	0
85000	127315	49245	0	0	0	0	115125	0
90000	127315	49245	0	0	25908	0	115125	0

GIWW-MN (continued)

Table B-1 (continued)

	1952	1954	1955	1957	1958	1960	1961	1962
95000	127315	49245	0	0	86360	0	115125	0
100000	129551	49245	0	0	77724	0	120551	0
105000	130510	49245	0	0	0	0	121155	0
110000	130510	49245	0	0	0	0	121155	0
115000	130510	49245	113516	0	0	0	121155	0
120000	130510	49245	0	0	322149	50127	60577	28097
125000	130510	49245	0	0	0	100255	0	56195
130000	130510	49245	0	0	14856	90229	38323	39336
135000	130510	49245	0	0	74280	0	127745	0
140000	130510	4924	0	42304	7428	0	127745	0
145000	130510	208138	0	141015	67122	0	282130	0
150000	42807	69379	0	42304	22374	0	89785	0
155000	0	0	5369	0	0	2695	0	0
160000	0	0	24782	81640	0	134790	38203	0
165000	0	0	0	92944	0	134790	70039	0
170000	0	0	0	126742	0	108186	0	0
175000	0	0	0	0	0	96785	0	0
180000	0	0	0	0	0	96785	0	0
185000	0	0	0	5607	0	67749	0	0
190000	0	0	0	40655	0	0	0	0
195000	0	0	0	43715	0	0	0	0
200000	88572	0	0	40894	0	0	0	0
205000	0	0	0	0	0	0	0	0
210000	55206	0	0	43485	0	0	14377	0
215000	178085	0	0	140275	0	0	130700	0
220000	122879	0	3950	96789	0	0	131481	0
225000	0	0	35910	0	0	0	133220	0
230000	0	0	35910	0	0	0	133220	0
235000	0	0	35910	0	0	0	133220	0
240000	0	0	35910	0	0	0	133220	0
245000	0	0	35910	0	0	0	113140	0
250000	0	0	35910	0	0	0	93850	0
255000	0	0	35910	0	0	0	93850	0

Table B-1 (continued)

GIWW-MN (continued)

	1952	1954	1955	1957	1958	1960	1961	1962
260000	0	0	35910	0	0	0	93850	0
265000	0	0	35910	0	0	0	93850	0
270000	0	0	35910	0	0	0	93850	0
275000	0	0	35910	0	0	0	93850	0
280000	0	0	35910	0	0	0	93850	0
285000	0	0	127806	0	0	0	260780	0
290000	0	0	136895	0	0	0	277290	0
295000	0	0	136895	0	0	0	277290	0
300000	84351	0	39699	0	0	0	135872	0
305000	118805	0	0	0	0	0	0	0
310000	118805	0	0	0	0	0	0	0
315000	118805	0	0	0	0	0	0	0
320000	118805	0	0	0	0	0	0	0
325000	118805	0	0	0	0	0	0	0
330000	10692	0	0	0	0	0	0	0
	1963	1964	1965	1966	1967	1968	1969	1970
0	0	142295	0	79334	0	0	82259	0
5000	0	129249	0	73773	0	0	0	81360
10000	0	119336	0	80972	0	0	0	86522
15000	0	112758	0	65371	0	0	26853	90736
20000	0	66549	0	120568	0	88177	8951	94951
25000	0	123139	0	123347	0	112541	0	122776
30000	0	99048	0	118855	0	98421	0	119619
35000	0	72059	0	124492	0	115997	0	117109
40000	0	161173	0	183402	0	192601	0	165985
45000	0	137443	0	186045	0	173087	0	165958
50000	0	52127	0	90727	0	45817	0	117797
55000	0	44527	0	88777	0	0	0	107741
60000	0	43630	0	83512	0	0	0	96001
65000	0	34450	0	75600	0	0	0	91453
70000	0	10385	0	76079	0	0	0	79796
75000	0	10385	0	79690	0	0	0	22344

GIWW-MN (continued)

Table B-1 (continued)

	1963	1964	1965	1966	1967	1968	1969	1970
80000	0	24678	0	78129	0	0	0	0
85000	0	31889	0	81518	0	0	0	0
90000	0	30776	0	72044	0	0	0	0
95000	0	45202	0	85991	0	0	0	56693
100000	0	45010	0	82962	0	0	0	56693
105000	0	39193	0	77056	0	0	0	0
110000	0	42170	0	86592	0	0	0	53497
115000	0	40140	0	86679	0	0	0	67699
120000	0	34839	0	94597	0	0	0	71233
125000	0	33176	0	92156	0	0	0	88364
130000	0	62242	0	127807	0	0	115801	28311
135000	0	107862	0	279189	0	0	201067	0
140000	0	25669	0	27758	0	0	68346	0
145000	0	143604	0	207955	0	0	253393	0
150000	0	65422	0	91237	0	0	124049	0
155000	2883	0	4563	0	0	3783	0	3298
160000	144180	0	208687	0	0	189160	0	158525
165000	144180	0	177495	0	0	212018	0	132147
170000	110153	0	150792	0	0	158177	0	73829
175000	95570	0	138242	0	0	108844	0	0
180000	95570	0	129575	0	0	97692	0	0
185000	83437	0	97210	0	0	67875	0	4725
190000	50618	0	60331	0	0	0	0	34257
195000	33449	0	44663	0	0	0	0	0
200000	74451	0	117463	0	0	0	0	0
205000	0	0	26649	0	0	0	0	0
210000	0	0	118494	0	29230	0	0	0
215000	0	0	414732	0	265730	0	0	0
220000	0	0	402140	0	199270	0	0	0
225000	0	0	240352	0	167546	0	0	0
230000	0	0	283452	0	90001	0	0	0
235000	0	0	230928	0	30011	0	0	0
240000	0	0	193944	0	8540	0	0	0

Table B-1 (continued)

GIWW-MN (continued)

	1963	1964	1965	1966	1967	1968	1969	1970
245000	0	0	176006	0	8540	0	0	0
250000	0	0	165012	0	8540	0	0	0
255000	0	0	155140	0	8540	0	0	0
260000	0	0	162954	0	8540	0	0	0
265000	0	0	191710	0	8540	0	0	0
270000	0	0	231118	0	8540	0	0	0
275000	0	0	246202	0	8540	0	0	0
280000	0	0	220880	0	105464	0	0	0
285000	0	0	345102	0	202394	0	0	0
290000	0	0	324866	0	203524	0	0	0
295000	0	0	273856	0	129154	0	0	0
300000	33048	0	131874	0	0	38762	0	0
305000	74541	0	0	0	0	80505	0	0
310000	91346	0	0	0	0	81212	0	0
315000	98347	0	0	0	0	78987	0	0
320000	98735	0	0	0	0	75913	0	0
325000	48632	0	0	0	0	35184	0	0
330000	0	0	0	0	0	0	0	0
	1971	1972	1973	1974	1976	1978	1980	1982
0	0	108107	0	88545	0	117746	0	0
5000	0	0	82235	0	0	102464	0	0
10000	0	0	92888	0	48779	103751	0	0
15000	0	0	97482	0	72845	89901	0	0
20000	0	0	101925	55611	76790	90305	0	0
25000	0	0	117485	96923	86793	106102	78597	0
30000	0	0	115496	104785	84665	123511	107044	0
35000	0	0	98334	105298	98528	116287	121380	0
40000	0	0	121790	129880	166278	161603	158478	0
45000	0	0	193059	127911	153023	165045	167818	0
50000	0	0	158282	36774	115732	68526	115449	0
55000	0	0	78499	0	100608	0	120525	0
60000	0	0	46851	0	92995	0	102962	0

## GIWW-MN (continued)

Table B-1 (continued)

	1971	1972	1973	1974	1976	1978	1980	1982
65000	0	0	46645	0	80582	0	102896	0
70000	0	0	14799	0	22848	0	30937	0
75000	0	40775	0	0	0	0	0	0
80000	0	65589	0	0	0	0	0	0
85000	0	63096	0	0	0	0	0	0
90000	0	54103	0	0	0	0	0	0
95000	0	15385	0	0	0	0	0	0
100000	0	17338	0	0	0	0	0	0
105000	0	57795	0	0	0	28305	0	0
110000	0	17338	0	0	0	90880	0	0
115000	0	0	0	8423	0	57949	0	0
120000	0	0	0	84230	0	0	0	0
125000	0	0	0	78056	0	0	0	0
130000	0	109637	0	70201	0	0	0	0
135000	0	156625	0	154652	0	0	0	0
140000	0	84674	0	45801	0	0	0	0
145000	0	161820	0	219753	0	282586	188520	0
150000	0	108144	0	83018	0	113035	113112	0
155000	0	0	2680	0	0	3531	0	3119
160000	0	0	132019	0	0	168412	0	150208
165000	0	0	114190	0	0	140759	0	130047
170000	0	0	101415	0	0	117527	0	124530
175000	0	0	111413	0	0	116723	0	127575
180000	0	0	114488	0	0	130699	0	129757
185000	0	0	86265	0	0	115054	0	91863
190000	0	0	53099	0	0	69483	0	55093
195000	0	0	0	0	0	0	0	0
200000	0	0	0	0	0	0	0	0
205000	0	0	0	0	0	0	0	0
210000	39529	0	0	99494	0	0	0	0
215000	127515	0	0	320950	0	0	0	49651
220000	123934	0	0	238958	0	0	0	160165
225000	107045	0	0	201328	0	0	0	128820
						0	0	94657

Table B-1 (continued)

GIWW-MN (continued)

	1971	1972	1973	1974	1976	1978	1980	1982
230000	131067	0	0	259342	0	0	0	97080
235000	114476	0	0	161382	0	0	0	68186
240000	119150	0	0	138786	0	0	0	68427
245000	92723	0	0	170766	0	0	0	103711
250000	86619	0	0	184632	0	0	0	97341
255000	103160	0	0	156996	0	0	0	117541
260000	108765	0	0	142730	0	0	0	106139
265000	126035	0	0	204390	0	0	0	140244
270000	154495	0	0	282116	0	0	0	149778
275000	165312	0	0	296686	0	0	0	152722
280000	144024	0	0	301188	0	0	0	177934
285000	220122	0	0	324108	0	0	0	227529
290000	138649	0	0	287126	0	0	0	145553
295000	116925	0	0	232562	0	0	0	142590
300000	80391	0	0	201630	0	0	0	154533
305000	0	0	0	152542	0	0	0	106692
310000	0	0	0	157484	0	0	0	92731
315000	0	0	0	139555	0	0	0	77528
320000	0	0	0	134049	0	0	0	79208
325000	0	0	0	12032	0	0	0	58207
330000	0	0	0	0	0	0	0	0

	1983	1985	1986	1988
0	119018	92933	0	53222
5000	48175	70273	0	0
10000	203041	74735	0	0
15000	53366	78422	0	0
20000	100090	101530	0	0
25000	120142	142509	0	0
30000	140195	126781	0	0
35000	156777	122592	0	0
40000	156564	168669	0	0
45000	138060	161802	0	0

Table B-1 (continued)

GIWW-MN (continued)

	1983	1985	1986	1988
50000	138060	106423	0	0
55000	102282	67322	0	0
60000	66505	44875	0	0
65000	66505	44734	0	0
70000	71894	14167	0	0
75000	72346	0	0	0
80000	93568	0	0	0
85000	103005	0	0	0
90000	95437	0	0	0
95000	92195	0	0	0
100000	92320	0	0	0
105000	92375	0	0	0
110000	91247	0	0	0
115000	90350	0	0	0
120000	86620	49098	0	0
125000	102636	68372	0	0
130000	155879	106125	0	0
135000	227472	87812	0	0
140000	113550	72890	0	0
145000	304073	258987	0	0
150000	155322	111866	0	0
155000	0	0	2789	0
160000	0	0	129214	0
165000	0	0	101471	0
170000	0	0	108658	0
175000	0	0	104149	0
180000	0	0	105444	0
185000	0	0	73758	0
190000	0	0	19879	0
195000	0	0	0	15421
200000	0	0	0	63319
205000	0	0	0	29270
210000	0	0	0	33823

Table B-1 (continued)

## GIWW-MN (continued)

	1983	1985	1986	1988
215000	0	0	0	108564
220000	0	0	0	121570
225000	0	0	0	94755
230000	0	0	0	140916
235000	0	0	0	94770
240000	0	0	0	120068
245000	0	0	0	87429
250000	0	0	0	95798
255000	0	0	0	81286
260000	0	0	68723	7176
265000	0	0	110118	0
270000	0	0	118398	0
275000	0	0	119790	0
280000	0	0	153527	0
285000	0	0	173931	0
290000	0	0	127949	0
295000	0	0	137285	0
300000	0	0	111888	0
305000	0	0	563711	0
310000	0	0	114916	0
315000	0	0	48075	0
320000	0	0	41712	0
325000	0	0	3713	0
330000	0	0	0	0

## GREEN-MN      Greens Bayou Channel

	1974	1978	1987
0	48082	47418	111655
5000	55933	93422	75052

Table B-1 (continued)

HSC-MN

## Houston Ship Channel

	1945	1946	1947	1948	1949	1950	1951	1952
0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0
10000	0	0	0	0	0	0	0	0
15000	0	0	0	0	0	0	0	0
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	0	0	0	0	0	0	0
85000	0	0	0	0	0	0	0	0
90000	0	0	519160	0	0	0	0	0
95000	0	0	519160	0	0	0	0	0
100000	0	0	518100	0	0	0	0	0
105000	0	0	466155	0	0	0	0	0
110000	0	0	466155	0	0	0	0	0
115000	0	0	438185	0	0	0	0	0
120000	0	0	201563	0	0	0	0	0
125000	0	0	592835	0	0	0	0	0
130000	0	0	592835	0	0	0	0	287572
135000	0	0	592835	0	0	0	0	532540
140000	0	0	566477	0	0	226716	0	532540
145000	0	0	564795	0	0	515265	0	409427
150000	0	0	564795	0	0	515265	0	170445

Table B-1 (continued)

HSC-MN (continued)

	1945	1946	1947	1948	1949	1950	1951	1952
155000	0	0	598913	0	0	527043	0	170445
160000	0	0	665145	0	0	527795	0	170445
165000	0	0	665145	0	0	515181	0	478374
170000	0	0	665145	0	0	546270	0	498030
175000	0	0	646126	0	0	551208	0	456029
180000	0	0	639445	0	0	595655	0	374500
185000	0	0	639445	0	0	595655	0	374500
190000	0	51901	549922	83630	0	35739	0	610501
195000	0	305300	0	491940	0	0	0	552835
200000	0	305300	0	512457	0	0	0	360678
205000	0	305300	0	531765	0	206204	0	296876
210000	0	305300	0	550465	0	215165	0	198360
215000	0	305300	0	579751	0	192646	0	198360
220000	0	305300	0	374918	0	195538	0	85294
225000	0	305300	0	213795	0	124029	21768	0
230000	0	305300	0	223494	0	0	126459	0
235000	0	305300	0	252584	0	0	118690	0
240000	0	305300	0	330425	0	0	171595	0
245000	0	305300	0	229617	0	0	471407	0
250000	0	210657	102040	156285	0	0	612505	0
255000	0	0	329160	0	0	0	130775	239900
260000	0	0	314025	0	0	0	0	235713
265000	0	0	112940	0	0	0	0	194299
270000	22133	0	105034	0	17978	0	0	199888
275000	311014	0	0	0	245696	0	0	79010
280000	297035	0	0	0	212265	0	0	44450
285000	303215	0	0	0	191269	0	101030	1333
290000	293186	0	0	0	167367	0	20532	0
295000	303776	0	0	0	178107	0	101440	0
300000	464462	0	0	0	207965	0	101440	0
305000	132207	0	0	265073	47832	0	134908	0
310000	0	0	0	517778	0	0	139822	0
315000	0	0	0	384775	0	0	115005	0

## HSC-MN (continued)

Table B-1 (continued)

	1945	1946	1947	1948	1949	1950	1951	1952
320000	0	0	0	881190	0	504067	59756	0
325000	0	0	0	0	0	0	0	0
330000	0	0	0	0	0	0	0	0
335000	0	0	0	0	0	26029	0	0
340000	0	0	0	0	0	23359	0	33664
345000	0	0	0	0	0	0	0	15818
								0
	1953	1954	1955	1956	1957	1958	1960	1961
0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0
10000	0	0	0	0	0	0	0	0
15000	0	0	0	0	0	0	0	0
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	0	0	0	0	0	0	0
85000	0	0	0	0	0	0	0	0
90000	0	0	0	0	0	0	0	0
95000	0	0	0	0	0	0	0	0
100000	0	0	0	0	0	0	0	0
105000	0	0	0	0	0	0	0	0
110000	0	0	0	0	0	0	0	0
115000	0	0	0	0	0	0	0	0
120000	0	46806	0	0	0	0	373401	0

Table B-1 (continued)

HSC-MN (continued)

	1953	1954	1955	1956	1957	1958	1960	1961
125000	0	334330	0	0	0	0	478720	0
130000	0	334330	0	0	0	0	509531	0
135000	0	334330	0	0	0	0	525405	0
140000	0	346359	0	0	0	0	501310	0
145000	0	346605	0	0	0	0	502297	0
150000	0	354144	0	0	0	0	504410	0
155000	0	361685	0	0	0	0	502175	0
160000	0	361685	0	0	0	0	497840	0
165000	0	353041	0	0	0	0	492773	0
170000	0	352865	0	0	0	0	482940	0
175000	0	375210	0	0	0	0	475490	0
180000	0	418585	0	0	0	0	460965	0
185000	0	418585	0	0	0	0	460965	0
190000	0	681703	353900	0	0	436941	27658	249266
195000	0	560688	343153	0	0	434115	0	214208
200000	0	473025	237250	0	0	354340	0	301023
205000	0	385957	237250	0	0	354340	0	422675
210000	0	383265	54567	0	0	471482	0	341569
215000	322688	88151	0	0	0	459399	0	667185
220000	419075	0	0	0	0	382715	0	238281
225000	347832	0	0	53498	0	317653	0	279420
230000	0	0	0	314695	0	0	0	279420
235000	56470	0	0	314695	0	0	0	329479
240000	275705	0	0	248424	0	0	0	414715
245000	0	0	0	228630	0	0	0	29030
250000	0	0	0	228630	0	0	0	0
255000	0	0	0	211426	0	0	0	0
260000	0	0	0	210895	0	0	0	0
265000	0	0	0	238824	0	0	0	0
270000	0	0	0	259895	0	0	0	0
275000	0	0	0	98869	0	0	215192	0
280000	0	0	0	52484	0	0	430789	0
285000	0	0	0	85825	0	0	505614	0

HSC-MN (continued)

Table B-1 (continued)

	1953	1954	1955	1956	1957	1958	1960	1961
290000	0	0	108225	47429	0	0	321898	69134
295000	0	0	292500	0	0	0	0	406670
300000	0	0	292500	0	0	0	0	321269
305000	0	0	67275	0	0	0	0	0
310000	0	0	0	0	0	0	0	0
315000	0	0	0	0	0	0	0	0
320000	359828	0	0	0	530514	0	252030	0
325000	0	0	0	0	0	0	117697	48583
330000	0	0	0	0	0	0	11064	607291
335000	0	0	0	0	26723	0	0	0
340000	0	0	0	0	8375	0	0	0
345000	0	0	0	0	0	0	0	0
	1962	1963	1964	1965	1966	1967	1968	1969
0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0
10000	0	0	0	0	0	0	0	0
15000	0	0	0	0	0	0	0	0
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	184742	0	0	0	0
35000	0	0	0	883060	0	0	0	0
40000	0	0	0	598236	0	0	0	0
45000	0	0	0	148633	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	17813	0	0	0	0	0	0
65000	0	123220	0	0	0	0	0	0
70000	0	103929	0	0	0	0	0	0
75000	0	146489	0	0	0	0	0	0
80000	0	206178	0	0	0	0	0	0
85000	0	210950	0	0	0	0	0	0
90000	0	207606	0	0	0	0	0	0

Table B-1 (continued)

HSC-MN (continued)

	1962	1963	1964	1965	1966	1967	1968	1969
95000	0	210888	0	0	0	0	0	0
100000	0	218053	0	0	0	0	0	0
105000	0	204185	0	0	0	0	0	0
110000	0	180754	0	0	0	0	0	0
115000	0	182500	0	0	0	0	0	0
120000	0	182595	0	0	284091	0	0	304827
125000	0	204781	0	0	518467	0	0	560484
130000	0	199022	0	0	470977	0	0	552239
135000	0	178783	0	0	466565	0	0	547958
140000	0	182163	0	0	461310	0	0	535601
145000	0	192304	0	0	442963	0	0	503423
150000	0	195024	0	0	419366	0	0	439696
155000	0	203983	0	0	442726	0	0	467511
160000	0	218982	0	0	426450	0	0	480306
165000	0	225818	0	0	425440	0	0	432001
170000	0	218801	0	0	416834	0	0	389302
175000	0	215012	0	0	426942	0	0	397973
180000	0	218002	0	0	427689	0	0	378642
185000	0	235890	0	0	469150	0	0	357490
190000	0	14153	316883	0	552852	0	446976	21449
195000	0	0	276233	0	480627	0	380150	0
200000	0	0	262702	0	520566	0	355036	0
205000	0	0	248558	0	507053	0	336557	0
210000	0	0	258966	0	489762	0	328705	0
215000	0	0	310941	0	569940	0	249423	0
220000	0	0	280200	0	17098	0	269058	0
225000	0	0	321930	0	0	0	211691	0
230000	0	0	261522	0	0	0	173938	0
235000	0	0	288051	0	0	0	224965	0
240000	0	0	205015	0	0	0	179760	0
245000	148665	0	14351	255606	0	0	211872	0
250000	180245	0	0	240079	0	0	222143	0
255000	69488	173662	0	186039	0	0	220988	0

Table B-1 (continued)

HSC-MN (continued)

	1962	1963	1964	1965	1966	1967	1968	1969
260000	0	304670	0	68010	0	0	234443	0
265000	0	304670	0	156600	0	0	219362	0
270000	0	304670	0	148186	0	5697	238493	7973
275000	0	289983	0	0	0	81385	0	113905
280000	0	201820	0	0	0	96589	0	131974
285000	0	507756	0	0	0	104152	0	174262
290000	0	339302	0	0	0	97217	0	193540
295000	0	257355	0	0	0	93455	0	234212
300000	0	332476	0	0	0	506046	0	292776
305000	50616	280505	28312	0	0	24797	104181	50493
310000	297745	0	166540	0	0	0	182468	0
315000	110046	0	180610	0	0	0	193432	0
320000	0	0	263597	0	0	0	122636	0
325000	32610	0	221138	44854	0	0	483545	0
330000	49548	0	0	59805	0	0	53730	0
335000	79896	0	0	50834	0	0	62997	0
340000	46846	0	0	0	0	0	44606	0
345000	29423	0	0	0	0	0	45656	0
	1970	1971	1972	1974	1975	1977	1978	1979
0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0
10000	0	0	0	0	0	0	0	0
15000	0	0	0	0	0	0	0	0
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	13140	0	0	0	60293
35000	0	0	0	71960	0	0	0	330195
40000	0	0	0	71960	0	0	0	330195
45000	0	0	0	71960	0	0	0	330195
50000	0	0	0	18709	0	0	0	85850
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0

Table B-1 (continued)

HSC-MN (continued)

	1970	1971	1972	1974	1975	1977	1978	1979
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	93034	0	0	0	227205	0	0
85000	0	216157	0	0	0	305759	0	0
90000	0	271895	0	0	0	302719	0	0
95000	0	317353	0	0	0	266461	0	0
100000	0	370808	0	0	0	342823	0	0
105000	0	351369	0	0	0	311983	0	0
110000	0	244331	0	0	0	163057	0	0
115000	0	224879	0	31247	0	207054	0	0
120000	0	257188	0	244154	0	236299	0	0
125000	0	288649	0	370946	0	354635	0	0
130000	0	292857	0	359157	0	306568	0	0
135000	0	268807	0	357812	0	300381	0	0
140000	0	225221	40416	285782	0	327330	0	0
145000	0	0	284825	0	0	347971	0	0
150000	0	0	264884	0	0	336362	0	0
155000	0	0	293685	0	0	303790	0	0
160000	0	0	335846	0	0	318745	0	0
165000	0	0	375677	0	0	388594	0	0
170000	0	0	336353	0	0	346888	0	0
175000	0	0	278909	0	0	286210	0	0
180000	0	0	252660	0	0	281399	0	0
185000	0	0	245535	0	0	305840	0	0
190000	369318	0	340269	0	414499	311345	0	0
195000	293664	0	238464	0	334147	280833	0	0
200000	291674	0	260082	0	352089	220488	0	0
205000	313696	0	313040	0	433146	361805	0	0
210000	346727	0	94348	0	430941	57889	0	0
215000	475560	0	260603	0	508552	0	0	0
220000	142170	0	0	0	308288	0	0	0
225000	115900	0	0	0	214722	0	0	0

Table B-1 (continued)

HSC-MN (continued)

	1970	1971	1972	1974	1975	1977	1978	1979
230000	127163	0	0	0	241150	0	0	0
235000	115581	0	20324	0	306477	0	0	0
240000	0	0	121970	0	289795	0	0	0
245000	0	0	80955	123571	95632	0	154632	0
250000	0	0	0	143511	0	0	286371	0
255000	0	0	0	110098	0	0	311122	0
260000	0	0	0	127996	0	0	205521	0
265000	0	0	0	104434	0	0	152155	0
270000	0	0	0	172870	0	0	183184	0
275000	0	0	0	67725	99106	0	65653	0
280000	0	0	0	0	134071	0	0	0
285000	0	0	0	0	345357	0	0	0
290000	0	0	0	0	217673	0	0	0
295000	0	0	0	0	220358	0	0	0
300000	0	0	0	0	442698	0	0	0
305000	0	89297	0	0	152190	0	0	146033
310000	0	130723	0	0	153072	0	0	243887
315000	0	146571	0	0	221776	0	0	298893
320000	0	331228	0	0	591028	0	0	543514
325000	0	151812	0	0	265927	0	0	203980
330000	0	16685	0	0	20116	0	0	0
335000	8529	20798	0	0	42790	0	0	0
340000	36670	0	0	0	17451	0	0	0
345000	29118	0	0	0	16987	0	0	0

	1980	1981	1983	1984	1985	1986	1987	1988
0	0	0	0	0	0	0	0	48115
5000	0	0	0	0	0	0	0	194447
10000	0	0	0	0	0	0	0	91798
15000	0	0	0	0	0	0	0	15726
20000	0	0	0	0	0	0	0	1082
25000	0	0	0	0	0	0	0	4862
30000	7299	0	0	94940	0	29357	0	99064

Table B-1 (continued)

HSC-MN (continued)	1980	1981	1983	1984	1985	1986	1987	1988
35000	40015	0	0	501952	0	142592	0	208570
40000	40015	0	0	402497	0	88295	0	156110
45000	40015	0	0	301525	0	164835	0	172494
50000	3201	0	0	81472	0	44538	0	46655
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	52299	0	0	0	0
80000	0	0	0	85609	0	0	0	0
85000	0	0	0	185657	0	0	0	0
90000	0	0	0	249266	0	0	0	0
95000	0	0	0	335414	0	0	0	0
100000	0	0	0	376427	0	0	0	0
105000	0	0	0	279587	0	0	0	0
110000	0	0	0	196510	0	0	0	0
115000	0	120879	0	191487	0	0	0	0
120000	0	172845	0	246270	0	49790	0	0
125000	0	327198	0	466988	0	349681	0	0
130000	0	293992	0	392766	0	307796	0	0
135000	0	271566	0	357974	0	266964	0	0
140000	0	256627	0	350441	0	213278	0	0
145000	0	224829	0	325558	0	210030	0	0
150000	0	191412	0	306102	0	230854	0	0
155000	0	238905	0	216487	0	223530	0	0
160000	0	225742	0	285037	0	213837	0	0
165000	0	309685	0	334770	0	236228	0	0
170000	0	287450	0	291473	0	177159	0	0
175000	0	263707	0	269518	0	146592	0	0
180000	0	229936	0	293921	0	142455	0	0
185000	0	252465	0	330923	0	166066	0	0
190000	0	354093	0	399794	53028	198033	0	182142
195000	0	219980	0	0	311935	0	0	187701

Table B-1 (continued)

HSC-MN (continued)

	1980	1981	1983	1984	1985	1986	1987	1988
200000	0	291430	0	0	295149	0	0	286121
205000	0	363836	0	0	436652	0	0	362353
210000	0	323975	0	0	532096	0	0	377114
215000	0	664463	0	0	473761	0	0	502202
220000	0	259010	0	0	231308	0	0	150579
225000	0	106428	0	0	174715	0	0	119532
230000	0	101710	0	0	160761	0	0	135664
235000	0	246516	0	0	222564	0	0	173948
240000	0	267362	0	0	267911	0	0	226466
245000	0	92304	149798	0	92760	77763	0	32749
250000	0	0	242629	0	0	113411	0	0
255000	0	0	242400	0	0	98539	0	0
260000	0	0	159626	0	0	90230	0	0
265000	0	0	131689	0	0	96529	0	0
270000	0	0	102770	0	0	96548	0	0
275000	118553	0	33914	0	0	34294	34220	0
280000	176945	0	0	0	0	0	84824	0
285000	196491	0	0	0	0	0	139691	0
290000	215937	0	0	0	0	0	121500	0
295000	181435	0	0	0	0	0	126695	0
300000	331557	0	0	0	0	0	144300	0
305000	116460	0	0	101998	0	0	44155	47181
310000	0	0	0	117525	0	0	0	68357
315000	0	0	0	144009	0	0	0	108668
320000	0	0	0	506435	0	0	0	284507
325000	0	0	0	202579	0	0	0	122080
330000	0	0	0	0	0	0	0	22143
335000	0	0	0	0	0	0	0	35741
340000	0	0	0	0	0	0	0	20072
345000	0	0	0	0	0	0	0	3253

Table B-1 (continued)

	1989	1990	1991
0	0	0	0
5000	0	0	0
10000	0	0	0
15000	0	0	0
20000	0	0	0
25000	0	17465	0
30000	0	63702	0
35000	0	234115	0
40000	0	325751	0
45000	0	224372	0
50000	0	88192	0
55000	0	0	0
60000	0	0	0
65000	0	0	0
70000	0	0	0
75000	0	0	43920
80000	0	0	81414
85000	0	0	78204
90000	0	0	78621
95000	0	0	224955
100000	0	0	252100
105000	0	0	238545
110000	0	0	89631
115000	86665	0	0
120000	141781	0	0
125000	297002	0	0
130000	315802	0	0
135000	287477	0	0
140000	259055	0	0
145000	246908	0	0
150000	206413	0	0
155000	198667	0	0

HSC-MN (continued)

Table B-1 (continued)

	1989	1990	1991
160000	214809	0	0
165000	253887	0	0
170000	229533	0	0
175000	163656	0	0
180000	155454	0	0
185000	167120	0	0
190000	10027	0	0
195000	0	0	0
200000	0	0	0
205000	0	0	0
210000	0	0	0
215000	0	0	0
220000	0	0	0
225000	0	0	0
230000	0	0	0
235000	0	0	0
240000	0	0	0
245000	0	149186	0
250000	0	126069	0
255000	0	149030	0
260000	0	109730	0
265000	0	127542	0
270000	0	87570	0
275000	0	37655	0
280000	0	0	0
285000	0	0	0
290000	0	0	0
295000	0	0	0
300000	0	0	0
305000	0	0	0
310000	0	0	0
315000	0	0	0
320000	0	0	237884

Table B-1 (continued)

HSC-MN (continued)

	1989	1990	1991
325000	0	0	74903
330000	0	0	20329
335000	0	0	34465
340000	0	0	0
345000	0	0	0

LIBC9-MN      Channel to Liberty, 9-ft Project

	1953	1972
0	0	0
5000	0	0
10000	0	0
15000	0	0
20000	0	114624
25000	0	244677
30000	0	159421
35000	0	196423
40000	0	0
45000	0	0
50000	0	0
55000	0	0
60000	0	0
65000	0	0
70000	0	0
75000	0	0
80000	0	0
85000	0	0
90000	0	0
95000	0	0
100000	42555	0
105000	0	0
110000	34043	0

Table B-1 (continued)

NFORK-MN

## North Fork Channel (Old Clear Lake Entrance)

	1946	1957	1960	1964	1966	1967	1970	1972
0	40846	47201	39442	40953	33104	5892	29532	42542
5000	32184	0	0	0	0	0	0	0
<b>1977</b>								
0	51627							
5000	0							

PTBOL-MN

## Channel to Port Bolivar

0	1947 26516	1949 72000	1951 207942	1952 72594	1954 69387	1955 60570	1959 63537	1964 57244
0	1966 39831	1967 53764	1969 50928	1970 41590	1973 49758	1976 45710	1980 64114	1983 68846
0	1985 79518							

TCC-MN

Texas City Channel

Table B-1 (continued)

TCC-MN (continued)

	1963	1965	1966	1968	1970	1972	1974	1977
0	141990	390070	116000	0	8462	55091	0	0
5000	452200	390070	116000	346644	604430	514898	421239	398580
10000	452200	390070	108203	601056	549723	670310	637866	685029
15000	399208	437717	105080	487398	404701	479154	485821	483932
20000	283435	448605	117186	403428	335615	370545	438433	345718
25000	283435	448605	122035	486113	350489	403692	421716	333415
30000	279968	504163	322426	540676	496774	251321	467584	349858
35000	126023	629718	418138	0	298016	0	385725	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0

	1979	1981	1985	1987	1990
0	0	0	201059	0	15783
5000	375041	390461	391165	303916	210113
10000	417289	510623	526618	312497	366777
15000	338518	424795	496587	244228	302167
20000	278128	437434	424736	264254	239747
25000	336920	436042	423324	196090	195496
30000	282937	404028	377144	137182	0
35000	0	516903	0	197331	0
40000	0	0	0	197900	0
45000	0	0	0	165876	0

TCCY-MN Texas City Channel "Wye" (intersection with GIWW)

	1955	1960	1963	1965	1968	1970	1973	1978
0	16516	135200	129998	128996	129422	108692	134459	164069
	1982	1986						
0	139736	139428						

Table B-1 (continued)

## TRIN-MN      Trinity River Channel

	1948	1949	1950	1951	1952	1954	1956	1957
0	0	0	0	0	0	0	0	0
5000	0	27039	0	0	24910	23236	47120	21655
10000	72873	92600	46280	59656	83985	78500	58900	108275
15000	68535	51652	7307	31398	22155	75360	58900	108275
20000	0	0	0	0	0	0	25091	14942
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	0	0	0	0	0	0	0
85000	0	0	0	30432	21193	19483	0	0
90000	0	0	0	9610	6692	6152	0	0
95000	0	0	0	0	0	0	0	0
100000	0	0	0	0	0	0	0	0
105000	0	0	0	0	0	0	0	0
110000	0	0	0	0	0	0	0	0
115000	0	0	0	0	0	0	0	0
120000	0	0	0	0	0	0	0	0
125000	0	0	0	0	0	0	0	0
130000	0	0	0	0	0	0	0	0
135000	0	0	0	0	0	0	0	0
140000	0	0	0	0	0	0	0	0
145000	0	0	0	0	0	0	0	0
150000	0	0	0	0	0	0	0	0

Table B-1 (continued)

TRIN-MN (continued)

	1948	1949	1950	1951	1952	1954	1956	1957
155000	0	0	0	0	0	0	0	0
160000	0	0	0	0	0	0	0	0
165000	0	0	0	0	0	0	0	0
170000	0	0	0	0	0	0	0	0
175000	0	0	0	0	0	0	0	0
180000	0	0	0	0	0	0	0	0
185000	0	0	0	0	0	0	0	0
190000	0	0	0	0	0	0	0	0
195000	0	0	0	0	0	0	0	0
200000	0	0	0	0	0	0	0	0
205000	0	0	0	0	0	0	0	0
210000	0	0	0	0	0	0	0	0
215000	0	0	0	0	0	0	0	0
220000	0	0	0	0	0	0	0	0
225000	0	0	0	0	0	0	0	0
230000	0	0	0	0	0	0	0	0
235000	0	0	0	0	0	0	0	0
240000	0	0	0	0	0	0	0	0
	1958	1959	1960	1961	1962	1964	1965	1966
0	0	0	5861	0	0	0	0	0
5000	26578	28664	58610	37641	58426	71615	56860	76760
10000	76443	71660	41027	24356	53557	71615	56860	76760
15000	17528	28664	0	0	0	60872	41473	33774
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0

Table B-1 (continued)

TRIN-MN (continued)

	1958	1959	1960	1961	1962	1964	1965	1966
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	0	0	0	0	0	0	0
85000	34418	0	0	18243	16663	0	15993	13538
90000	1811	0	0	960	877	0	7108	5854
95000	0	0	0	0	0	0	0	0
100000	0	0	0	0	0	0	0	0
105000	0	0	0	0	0	0	0	0
110000	0	0	0	0	0	0	0	0
115000	0	0	0	0	0	0	0	0
120000	0	0	0	0	0	0	0	0
125000	0	0	0	0	0	0	0	0
130000	0	0	0	0	0	0	0	0
135000	0	0	0	0	0	0	0	0
140000	0	0	0	0	0	0	0	0
145000	0	0	0	0	0	0	0	0
150000	0	0	0	0	0	0	0	0
155000	0	0	0	0	0	0	0	0
160000	0	0	0	0	0	0	0	0
165000	0	0	0	0	0	0	0	0
170000	0	0	0	0	0	0	0	0
175000	0	0	0	0	0	0	0	0
180000	0	0	0	0	0	0	0	0
185000	0	0	0	0	0	0	0	0
190000	0	0	0	0	0	0	0	0
195000	0	0	0	0	0	0	0	0
200000	0	0	0	0	0	0	0	0
205000	0	0	0	0	0	0	0	0
210000	0	0	0	0	0	0	0	0
215000	0	0	0	0	0	0	0	0
220000	0	0	0	0	0	0	0	0
225000	0	0	0	0	0	0	0	0

Table B-1 (continued)

TRIN-MN (continued)

	1958	1959	1960	1961	1962	1964	1965	1966
230000	0	0	0	0	0	0	0	0
235000	0	0	0	0	0	0	0	0
240000	0	0	0	0	0	0	0	0
	1967	1968	1969	1970	1971	1972	1973	1974
0	21507	0	20865	6200	23178	0	31016	16870
5000	71690	72475	89185	67076	82180	56903	83535	67911
10000	71690	66331	66919	65190	73840	77054	85876	61689
15000	43014	0	0	0	12672	14560	43802	23410
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	0	0	0	0	0	0	0
85000	0	0	22577	0	0	19670	0	21667
90000	0	0	5055	0	0	6211	0	6842
95000	0	0	0	0	0	0	0	0
100000	0	0	0	0	0	0	0	0
105000	0	0	0	0	0	0	0	0
110000	0	0	0	0	0	0	0	0
115000	0	0	0	0	0	0	0	0
120000	0	0	0	0	0	0	0	0
125000	0	0	0	0	0	0	0	0
130000	0	0	0	0	0	0	0	0
135000	0	0	0	0	0	0	0	0

TRIN-MN (continued)

Table B-1 (continued)

	1967	1968	1969	1970	1971	1972	1973	1974
140000	0	0	0	0	0	0	0	0
145000	0	0	0	0	0	0	0	0
150000	0	497	0	0	0	0	0	0
155000	0	43478	0	0	0	0	0	0
160000	0	31483	0	0	0	0	0	0
165000	0	27606	9964	0	0	0	0	0
170000	0	8148	9831	0	0	0	0	0
175000	0	13901	9731	0	0	0	0	0
180000	0	27868	6378	0	0	0	0	0
185000	0	62740	32338	0	0	0	0	0
190000	0	113256	84644	0	20421	9761	0	14726
195000	0	91631	73139	0	4860	0	0	56904
200000	0	110564	53130	0	22105	0	0	103657
205000	0	125947	57105	0	0	0	0	74987
210000	0	117466	64496	25767	3975	17715	0	89802
215000	0	125024	93148	33554	0	39906	0	101298
220000	0	146442	80658	54666	0	57875	0	148134
225000	0	180598	155016	5029	0	0	0	4684
230000	0	96974	88220	0	0	0	0	0
235000	0	120911	256514	0	0	0	0	0
240000	0	3882	6307	0	0	0	0	0
	1975	1977	1979	1982	1984	1986	1987	1990
0	23306	29768	76385	57815	19549	34520	31765	70460
5000	74725	85744	82573	59497	97745	92450	83595	126030
10000	51692	71047	89277	66225	90025	65460	51790	119725
15000	19758	39940	83265	26895	56055	57750	43215	81270
20000	0	0	8326	26895	22422	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0

Table B-1 (continued)

TRIN-MN (continued)

	1975	1977	1979	1982	1984	1986	1987	1990
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	0	0	0	0	0	0	0
70000	0	0	0	0	0	0	0	0
75000	0	0	0	0	0	0	0	0
80000	0	0	0	0	0	0	0	0
85000	0	22859	0	0	0	0	0	0
90000	0	7218	0	0	0	0	0	0
95000	0	0	0	0	0	0	0	0
100000	0	0	0	0	0	0	0	0
105000	0	0	0	0	0	0	0	0
110000	0	0	0	0	0	0	0	0
115000	0	0	0	0	0	0	0	0
120000	0	0	0	0	0	0	0	0
125000	0	0	0	0	0	0	0	0
130000	0	0	0	0	0	0	0	0
135000	0	0	0	0	0	0	0	0
140000	0	0	0	0	0	0	0	0
145000	0	0	0	0	0	0	0	0
150000	0	0	0	0	0	0	0	0
155000	0	0	0	0	0	17653	0	0
160000	0	0	0	0	0	15641	0	0
165000	0	0	0	0	0	9206	0	0
170000	0	0	0	0	0	0	0	0
175000	0	0	0	0	0	0	0	0
180000	0	0	0	0	0	11706	0	0
185000	0	0	0	0	0	41810	0	0
190000	0	29704	0	0	0	44335	0	0
195000	0	42437	0	0	0	97375	19509	0
200000	0	77747	0	0	0	72237	18246	0
205000	0	34736	0	0	0	38428	8455	0
210000	0	39989	0	0	0	123215	62861	0

Table B-1 (continued)

TRIN-MN (continued)

	1975	1977	1979	1982	1984	1986	1987	1990
215000	0	73953	0	0	0	54791	24273	0
220000	0	121147	0	0	0	201095	58955	0
225000	0	1749	0	0	0	60480	0	0
230000	0	0	0	0	0	17260	0	0
235000	0	0	0	0	0	22113	0	0
240000	0	0	0	0	0	0	0	0

TURKY-MN      Turkey Bend Channel

	1968	1971	1975	1988
0	18277	12255	14486	27109

Table B-2  
 New work dredging (cubic yards) by year and 5000-ft reach  
 GBNEP coordinates (ft), see Table A-1

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GALV-NW      Galveston Channel

	1966	1975
0	853300	590070
5000	1157602	1270129
10000	1127045	1296870
15000	1208398	1435041
20000	622483	400878

GIWW-NW      Gulf Intracoastal Waterway

	1943	1944	1954
0	121060	0	0
5000	121060	0	0
10000	121060	0	0
15000	121060	0	0
20000	121060	0	0
25000	121060	0	0
30000	121060	0	0
35000	121060	0	0
40000	121060	0	0
45000	121060	0	0
50000	121060	0	0
55000	118943	0	0
60000	112240	0	0
65000	112240	0	0
70000	112240	0	0
75000	112240	0	0
80000	112240	0	0
85000	112240	0	0
90000	112240	0	0

GIWW-NW (continued)

Table B-2 (continued)

	1943	1944	1954
95000	112240	0	0
100000	112240	0	0
105000	112240	0	0
110000	112240	0	0
115000	112240	0	0
120000	112240	0	0
125000	112240	0	0
130000	112240	0	0
135000	112240	0	0
140000	112240	0	0
145000	112240	0	0
150000	36814	0	0
155000	0	0	153471
160000	0	0	767355
165000	0	0	767355
170000	0	0	474944
175000	0	0	182535
180000	0	0	182535
185000	0	0	164281
190000	0	57066	0
195000	0	380445	0
200000	0	380445	0
205000	0	380445	0
210000	0	380445	0
215000	0	380445	0
220000	95209	178809	0
225000	177844	0	0
230000	0	22663	0
235000	0	174335	0
240000	0	174335	0
245000	0	174335	0
250000	0	174335	0
255000	0	174335	0

Table B-2 (continued)

## GIWW-NW (continued)

	1943	1944	1954
260000	0	174614	0
265000	0	202275	0
270000	0	202275	0
275000	0	202275	0
280000	0	202275	0
285000	0	202275	0
290000	0	202275	0
295000	0	202275	0
300000	0	202275	0
305000	0	202275	0
310000	0	202275	0
315000	0	202275	0
320000	0	200252	0

## HSC-NW

## Houston Ship Channel

	1949	1950	1951	1952	1956	1957	1959	1960
0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0
10000	0	0	0	0	0	0	0	0
15000	0	0	0	0	0	0	0	0
20000	0	0	0	0	0	0	0	0
25000	0	0	0	0	0	0	0	0
30000	0	0	0	0	0	0	0	0
35000	0	0	0	0	0	0	0	0
40000	0	0	0	0	0	0	0	0
45000	0	0	0	0	0	0	0	0
50000	0	0	0	0	0	0	0	0
55000	0	0	0	0	0	0	0	0
60000	0	0	0	0	0	0	0	0
65000	0	34000	0	0	0	0	0	0
70000	0	566670	0	0	0	0	0	0
75000	0	566670	0	0	0	0	0	0

Table B-2 (continued)

HSC-NW (continued)

	1949	1950	1951	1952	1956	1957	1959	1960
80000	0	547717	0	0	0	0	0	0
85000	0	493775	0	0	0	0	0	0
90000	0	493775	0	0	0	0	0	0
95000	0	397415	0	0	0	0	0	0
100000	0	338355	0	0	0	0	0	0
105000	0	338355	0	0	0	0	0	0
110000	0	338355	0	0	0	0	0	0
115000	0	544086	0	0	0	0	0	0
120000	0	577300	0	0	0	0	0	0
125000	0	578038	0	0	0	0	0	0
130000	0	582575	0	0	0	0	0	0
135000	0	582575	0	0	0	0	0	0
140000	0	374362	0	0	0	0	0	0
145000	0	109365	0	0	0	0	0	0
150000	0	109365	0	0	0	0	0	0
155000	0	111865	0	0	0	0	0	0
160000	0	112025	0	0	0	0	0	0
165000	0	109346	0	0	0	0	0	0
170000	0	115945	0	0	0	0	0	0
175000	0	116993	0	0	0	0	0	0
180000	0	126430	0	0	0	0	0	0
185000	0	126430	0	0	0	0	0	0
190000	1647679	7585	0	0	0	0	0	0
195000	808155	0	0	0	0	0	0	0
200000	662225	0	0	0	0	0	0	0
205000	19866	632511	0	0	0	0	0	0
210000	0	659996	0	0	0	0	0	0
215000	0	590919	0	0	0	0	0	0
220000	0	599796	0	0	0	0	0	0
225000	0	380452	105486	0	0	0	0	0
230000	0	0	612825	0	0	0	0	0
235000	0	0	575165	0	0	0	0	0
240000	0	0	536681	0	0	0	0	0

Table B-2 (continued)

HSC-NW (continued)

	1949	1950	1951	1952	1956	1957	1959	1960
245000	0	0	385492	0	0	0	0	0
250000	0	0	500876	0	0	0	0	0
255000	0	0	106942	660515	0	0	0	0
260000	0	0	0	648992	0	0	0	0
265000	0	0	0	534968	0	0	0	0
270000	0	0	0	550350	0	0	0	0
275000	0	0	0	217544	397908	0	0	0
280000	0	0	0	122390	534223	0	0	0
285000	0	0	82615	3671	873560	0	0	0
290000	0	0	16789	0	482754	469811	0	0
295000	0	0	82950	0	0	719134	0	0
300000	0	0	82950	0	0	522822	112988	0
305000	0	0	110319	0	0	0	685617	0
310000	0	0	114338	0	0	0	875531	0
315000	0	0	94045	0	0	0	34274	927651
320000	0	0	48866	0	0	0	0	433218
325000	0	0	0	0	0	0	0	40725
330000	0	0	0	0	0	0	0	0
335000	0	0	0	0	0	0	0	17799
	1961	1962	1963	1964	1965	1976		
0	0	0	0	0	0	0		
5000	0	0	0	0	0	0		
10000	0	0	0	0	0	0		
15000	0	0	0	0	0	0		
20000	0	0	0	0	0	0		
25000	0	0	0	0	0	0		
30000	0	0	0	0	233465	0		
35000	0	0	0	0	1115961	0		
40000	0	0	0	0	756015	0		
45000	0	0	0	0	187832	0		
50000	0	0	0	0	0	0		
55000	0	0	0	0	0	0		

Table B-2 (continued)

HSC-NW (continued)

	1961	1962	1963	1964	1965	1976
60000	0	0	41612	0	0	0
65000	0	0	287851	0	0	0
70000	0	0	242788	0	0	0
75000	0	0	342210	0	0	0
80000	0	0	481640	0	0	0
85000	0	0	492788	0	0	0
90000	0	0	484975	0	0	0
95000	0	0	492646	0	0	0
100000	0	0	509381	0	0	0
105000	0	0	476982	0	0	0
110000	0	0	422253	0	0	0
115000	0	0	426327	0	0	0
120000	0	0	417809	0	0	0
125000	0	0	462217	0	0	0
130000	0	0	449223	0	0	0
135000	0	0	403545	0	0	0
140000	0	0	411173	0	0	0
145000	0	0	434062	0	0	0
150000	0	0	440201	0	0	0
155000	0	0	460420	0	0	0
160000	0	0	494279	0	0	0
165000	0	0	509708	0	0	0
170000	0	0	493868	0	0	0
175000	0	0	485313	0	0	0
180000	0	0	492059	0	0	0
185000	0	0	532445	0	0	0
190000	329393	0	31946	489054	0	0
195000	283065	0	0	426317	0	0
200000	397786	0	0	405434	0	0
205000	558544	0	0	383609	0	0
210000	451364	0	0	399667	0	0
215000	881647	0	0	479885	0	491408
220000	141336	0	0	432439	0	0

Table B-2 (continued)

## HSC-NW (continued)

	1961	1962	1963	1964	1965	1976
225000	0	0	0	496844	0	0
230000	0	0	0	403612	0	0
235000	0	0	0	444560	0	0
240000	0	0	0	316400	0	0
245000	0	1698284	0	22148	262618	0
250000	0	2059037	0	0	246664	0
255000	0	793795	822709	0	191142	0
260000	0	0	1443350	0	69875	0
265000	0	0	1443350	0	160895	0
270000	0	0	1443350	0	170865	0
275000	0	0	1237239	0	265940	0
280000	752823	0	0	0	315621	0
285000	499240	0	0	0	340335	0
290000	0	0	0	0	317675	0
295000	0	0	0	0	305385	0
300000	0	0	0	0	1653565	0
305000	0	106300	0	0	81029	0
310000	0	625295	0	0	0	42154
315000	0	231109	0	0	0	90330
320000	0	0	0	0	0	0
325000	0	0	0	0	0	0
330000	0	0	0	0	0	0
335000	0	0	0	0	0	0

## LIBC9-NW      Channel to Liberty, 9-foot project

	1949	1950
0	128390	0
5000	168935	0
10000	168935	0
15000	168935	0
20000	168935	0
25000	379651	0

Table B-2 (continued)

LIBC9-NW (continued)

	1949	1950
30000	432330	0
35000	391378	0
40000	381140	0
45000	379982	0
50000	378825	0
55000	375442	0
60000	361910	0
65000	361910	0
70000	361806	0
75000	361780	0
80000	374069	0
85000	393520	0
90000	403972	0
95000	325268	76753
100000	0	382682
105000	0	376213
110000	0	426982
115000	0	428025
120000	0	225132

TCC-NW Texas City Channel

	1959	1966	1981
0	178471	502195	0
5000	570611	502195	0
10000	727720	468443	0
15000	851063	454925	0
20000	775077	507328	0
25000	823145	528320	0
30000	744299	1395858	0
35000	1355396	1810217	2730151
40000	0	0	1355314
45000	0	0	1248227

Table B-3  
Entry format for D&Fnn.WK1 (LOTUS 123™) and 404.DAT (ASCII)

PERMIT -----  
COUNTY -----  
DATE ----- WATERBODY  
EXPIRDATE 31 Dec XX

NATURE OF PROJECT:

- |            |                |                |
|------------|----------------|----------------|
| oil field  | dock/pier      | residentl fill |
| pipeline   | boat slip/moor | industrl fill  |
| dike/groin | marina         | dredging       |
| bulkhead   | boat ramp      | maint. dredg   |
| revetment  | canal/channel  | mitigation     |
|            | borrow area    | other:         |

--DREDGE--

VOLUME (new):

AREA (new):

VOLUME(maint):

AREA(maint):

LOCATION:

lat/long:

MATERIAL:

unsp

HABITAT: Loss

CODE

CODE

CODE

CODE

- FILL -

VOLUME (new):

AREA (new):

VOLUME(maint):

AREA(maint):

LOCATION:

lat/long:

MATERIAL:

unsp

Gain

-DREDGE-

DISPOSAL:

- . upland
- . open bay
- . confined
- . unconfined
- . leveed
- . other:

-----  
HABITAT:

- . pre-altered
- . exist dredged
- . bay bottom
- . shallow
- . unknown
- . intertidal
- . vegetated
- . spartina
- . other:

- . oyster reef
- . freshwater
- . unspecified

- FILL -

SOURCE:

- . dredged area
- . upland
- . sand bar
- . other:

-----  
HABITAT:

- . pre-altered
- . exist dredged
- . bay bottom
- . shallow
- . unknown
- . intertidal
- . vegetated
- . spartina
- . other:

- . oyster reef
- . freshwater
- . unspecified

NOTES:

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